PSOMAS

Information and Engineering Solutions

April 13, 2000

Rusty Netz
Sunnyside Cogeneration Associates
PO Box 10
East Carbon, UT 84520
(435) 888-4476

RE: First Quarter 2000 Inspections

Dear Rusty,

On March 21, 2000, Psomas completed the First Quarter Inspection of SCA's Impoundments, Refuse Pile, and Excess Spoil Disposal Areas. These areas appeared stable, with no structural weakness or hazardous conditions. In general, the site appeared in good condition and well maintained.

I have enclosed the certified inspection reports associated with each facility.

Please feel free to call me at (801) 270-5777 if you have any questions.

Sincerely,

Scott

S. Scott Carlson, P.E.
Project Manager

Enclosure

File in:
☐ Confidential
☐ Shelf
☒ Expandable
Refer to Record No 0010 Date 04/17/2000
In C/0070035, 2000, Delaming
For additional information

2825 E. Cottonwood Parkway
Suite 120
Salt Lake City, UT 84121

801.270.5777
801.270.5782 Fax
www.psomas.com

0010

COPY

Sunnyside Cogeneration Associates

P.O. Box 10, East Carbon, Utah 84520 • (435) 888-4476 • Fax (435) 888-2538

April 17, 2000

Daron Haddock
STATE OF UTAH
Division of Oil, Gas & Mining
1594 W. North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

RE: First Quarter 2000 Inspection Report

Dear Mr. Haddock:

Please find enclosed a copy of the First Quarter 2000 Inspection Report for Sunnyside Cogeneration Associates' impoundments, refuse pile and excess spoil areas. The inspection was performed by a professional engineer from Psomas and Associates Engineering.

Should you have any questions, please contact Rusty Netz at (435)888-4476.

RECEIVED
APR 19 2000
DIVISION OF
OIL, GAS AND MINING

Sincerely,

Agent For
Sunnyside Cogeneration Associates

Randy J. Scott
Plant Manager

Enclosure

c.c. Bill Malencik/Division of Oil, Gas & Mining
Rusty Netz, COSI
Plant File

File in:
C/007/035, 2000, Incoming
Refer to:
☐ Confidential
☐ Shelf
☒ Expandable
Date 04/17/00 For additional information

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Clear Water Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Clear Water Pond	
	Impoundment Number	004	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 4.9 acre-feet
Maximum Sediment Depth Elevation = 6527
Existing Sediment Elevation = 6523+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6530.1

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Clear Water Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

No discharge, inlet/outlet conditions are good,
no structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

Pond was dry.
No structure or stability problems observed.
Reclamation of the Sunnyside Coal Property is currently underway. Among the facilities being reclaimed is the Slurry Ditch which connected to the SCA Properties. This ditch has been filled in near the SCA Property and is no longer a major storm water conveyance facility to the Slurry Ponds #1 and #2 or to the Clearwater Pond or to the East Slurry Cell. Watersheds which previously contributed to these ponds are no longer doing so.

In accordance with the approved plan to construct the Excess Spoil Disposal area #2, the Slurry Ponds #1 and #2 no longer receive storm runoff. These storm flows are now routed directly to either the East Slurry Cell or to the Clear Water Pond. With the reclamation activities at Sunnyside Coal, both of these ponds have ample capacity to handle the stormflows without the Slurry Ponds in series.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Clear Water Pond	

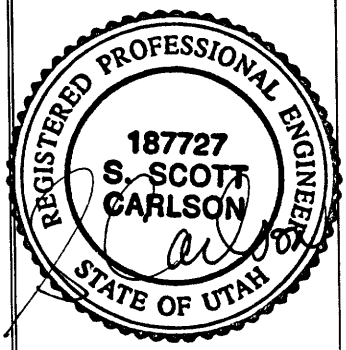
CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

None

Certification Statement:



I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson Project Manager
(Full Name and Title)

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Railcut Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Railcut Sediment Pond	
	Impoundment Number	007	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND.

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 4.8 acre-feet
Maximum Sediment Depth Elevation = 6207.7
Estimated Existing Sediment Elevation = 6207+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6212.34
Primary Drain Elevation = 6209.07

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Railcut Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

No discharge, inlet/outlet conditions are good,
no structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes. Pond was dry. No structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Railcut Pond	

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

None

Certification Statement:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

By: S. Scott Carlson, P.E. Project Manager

Signature: S Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		OCRR Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Old Coarse Refuse Road Sediment Pond	
	Impoundment Number	008	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 0.9 acre-feet
Maximum Sediment Depth Elevation = 6394.75
Estimated Existing Sediment Elevation = 6394+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6399.4
Primary Drain Elevation = 6395.75

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	OCRR Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

No discharge, pond was dry, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes, no structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: J Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	OCRR Pond	

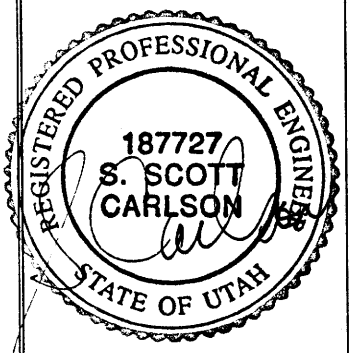
CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

none

Certification Statement:



I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, P.E. Project Manager

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Pasture Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Pasture Sediment Pond	
	Impoundment Number	009	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 1.0 acre-feet
Maximum Sediment Depth Elevation = 6485.5
Estimated Existing Sediment Elevation = 6484+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6490.6
Primary Drain Elevation = 6486.6

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Pasture Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond was dry.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes. No structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S. Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Pasture Pond	

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

none

Certification Statement:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

By: S. Scott Carlson - Project Manager

Signature: Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		CRT Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	New Coarse Refuse Toe Sediment Pond	
	Impoundment Number	012	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 1.6 acre-feet
Maximum Sediment Depth Elevation = 6177.0
Estimated Existing Sediment Elevation = 6176+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6183.63
Primary Drain Elevation = 6178.2

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	CRT Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond was dry.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes. No structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: J Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	CRT Pond	

CERTIFIED REPORT

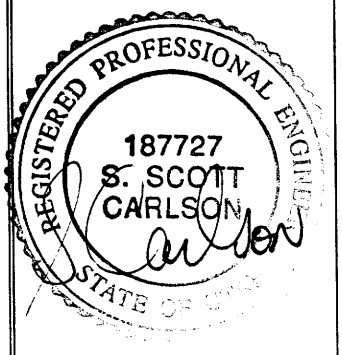
IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

None

Certification Statement:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.



By: S. Scott Carlson - Project Manager

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		COAL RUNOFF POND	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Coal Runoff Sediment Pond	
	Impoundment Number	014	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 1.5 acre feet
Maximum Sediment Depth Elevation = 6476.0
Estimated Existing Sediment Elevation = 6474±

3. Principle and emergency spillway elevations.

Spillway Elevation = 6477.9
Emergency Spillway Elevation = 6479.0

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	COAL RUNOFF POND	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had very little water in it.
No discharge, inlet and outlet conditions are good.
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes.
No structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: J Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	COAL RUNOFF POND	

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

None

Certification Statement:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

REGISTERED PROFESSIONAL ENGINEER 187727 S. SCOTT CARLSON STATE OF UTAH

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		Borrow Area Pond	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	Borrow Area Pond	
	Impoundment Number	016	
	UPDES Permit Number	UT 024759	
	MSHA ID Number	N/A	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 8.3 acre-feet
Maximum Sediment Depth Elevation = 6513.3
Estimated Existing Sediment Elevation = 6511+-

3. Principle and emergency spillway elevations.

Spillway Elevation = 6517.03
Primary Drain Elevation = 6514.3

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Borrow Area Pond	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond was dry.
No discharge, inlet/outlet conditions are good,
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

No changes.
No structure or stability problems observed.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	Borrow Area Pond	

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

none

Certification Statement:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

By: S. Scott Carlson, P.E. Project Manager

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 Utah

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE		Coarse Refuse Pile
Permit Number	ACT/007/035	**Report Date 04/13/00**
Mine Name	SUNNYSIDE REFUSE AND SLURRY	
Company Name	SUNNYSIDE COGENERATION ASSOCIATES	
Excess Spoil Pile or Refuse Pile Identification	**Pile Name:**	Coarse Refuse Pile
	Pile Number	N/A
	MSHA ID Number	1211-UT-09-02093-01
Inspection Date	03/21/00	
Inspected By	Scott Carlson	
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)		First Quarter Inspection 2000
		Attachments to Report? ☐ **No** **X** **Yes**

Field Evaluation

1. **Foundation preparation, including the removal of all organic material and topsoil.**

   N/A

2. **Placement of underdrains and protective filter systems.**

   N/A

3. **Installation of final surface drainage systems.**

   N/A

4. **Placement and compaction of fill materials.**

   N/A

   Removal of Coarse and fine Refuse Material Only

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE	Coarse Refuse Pile

5. **Final grading and revegetation of fill.**

N/A

6. **Appearances of instability, structural weakness, and other hazardous conditions.**

During the fourth quarter 1999, excavation of refuse material had damaged a small portion of the westerly access road around the refuse pile. This quarter's inspection showed that the operator had repaired the road and adjacent ditch and berm.

7. **Other Comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatement of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period.**

Waste Coal Removal

No smokers visible

Certification Statement

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

West Cell/Refuse Pile

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	East Slurry Cell	

Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	East Slurry Cell	
	Impoundment Number	N/A	
	UPDES Permit Number	N/A	
	MSHA ID Number	1211-UT-09-02093-02	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = 27+- acre-feet
Maximum Sediment Depth Elevation = N/A
Estimated Existing Sediment Elevation = N/A

3. Principle and emergency spillway elevations.

N/A

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	East Slurry Cell	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond surface was dry.
No structural or hazardous conditions exist.

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

Slurry Cell is not receiving slurry from any source, currently functioning as a sediment pond. No structural or stability problems observed.
Reclamation of the Sunnyside Coal Property is currently underway. Among the facilities being reclaimed is the Slurry Ditch which connected to the SCA Properties. This ditch has been filled in near the SCA Property and is no longer a major storm water conveyance facility to the Slurry Ponds #1 and #2 or to the Clearwater Pond or to the East Slurry Cell. Watersheds which previously contributed to these ponds are no longer doing so.

In accordance with the approved plan to construct the Excess Spoil Disposal area #2, the Slurry Ponds #1 and #2 no longer receive storm runoff. These storm flows are now routed directly to either the East Slurry Cell or to the Clear Water Pond. With the reclamation activities at Sunnyside Coal, both of these ponds have ample capacity to handle the stormflows without the Slurry Ponds in series.

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	East Slurry Cell	

CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

none

Certification Statement:

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT		West Cell	
Permit Number	ACT/007/035	**Report Date** 04/13/00	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Impoundment Identification	**Impoundment Name**	West Slurry Cell	
	Impoundment Number	N/A	
	UPDES Permit Number	N/A	
	MSHA ID Number	1211-UT-09-02093-03	

IMPOUNDMENT INSPECTION

Inspection Date	03/21/00
Inspected By	Scott Carlson
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

NONE

Required for an impoundment which functions as a SEDIMENTATION POND

2. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and, estimated average elevation of existing sediment.

Storage Capacity = N/A
Maximum Sediment Depth Elevation = N/A
Estimated Existing Sediment Elevation = N/A

3. Principle and emergency spillway elevations.

N/A

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	West Cell	

4. Field Information. Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/instrumentation information, inlet/outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/repairs, monitoring information, vegetation on outslopes of embankments, etc.

Slurry Cell is Inactive
Refuse Removal

5. Field Evaluation. Describe any changes in the geometry of the impounding structure, average and maximum depths and elevations of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period.

Slurry Cell is not receiving slurry from any source

Qualification Statement

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized under the direction of a Registered Professional Engineer to inspect the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Signature: S Scott Carlson **Date:** 04/13/00

IMPOUNDMENT INSPECTION AND CERTIFIED REPORT	West Cell	

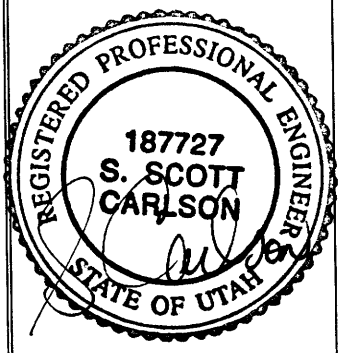
CERTIFIED REPORT

IMPOUNDMENT EVALUATION (If NO, explain under Comments)	YES	NO
1. Is impoundment designed and constructed in accordance with the approved plan?	yes	
2. Is impoundment free of instability, structural weakness, or any other hazardous condition?	yes	
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection?	yes	

COMMENTS AND OTHER INFORMATION

none

Certification Statement:



I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 UT

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE		Excess Spoil Pile #1	
Permit Number	ACT/007/035	**Report Date 04/13/00**	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Excess Spoil Pile or Refuse Pile Identification	**Pile Name:**	Excess Spoil Disposal Area #1	
	Pile Number	N/A	
	MSHA ID Number	1211-UT-09-02093-04	
Inspection Date	03/21/00		
Inspected By	Scott Carlson		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	First Quarter Inspection 2000		
	Attachments to Report? ☐ No ☒ Yes		

Field Evaluation

1. **Foundation preparation, including the removal of all organic material and topsoil.**

   N/A

2. **Placement of underdrains and protective filter systems.**

   N/A

3. **Installation of final surface drainage systems.**

   N/A

4. **Placement and compaction of fill materials.**

   Received approximately 250 yrds of spoils materials during this Quarter.

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE	Excess Spoil Pile #1	

5. **Final grading and revegetation of fill.**

N/A

6. **Appearances of instability, structural weakness, and other hazardous conditions.**

None

7. **Other Comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatement of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period.**

Construction has been proceeding in shallow lifts in general conformance with the approved plan.

No evidence exists of fires in the pile.

Analytical results from samples taken of the material placed in this disposal area are submitted with this quarter's report.

Certification Statement

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

Excess Spoil Disposal Area # 1

SUNNYSIDE COGENERATION ASSOCIATES - SPOILS AREA SAMPLES - DECEMBER 1999

Sample Site	Spoil #1 E	Spoile #1 C	Spoils #1 W	Spoils #2 C North	Spoils #2 C South
Lab No.	72-00758-1	72-00759-1	72-00760-1	72-00761-1	72-00762-1
Depths					
pH	7.36	6.91	7.24	6.97	7.0
EC (mmhos/cm @ 25 °C)	2.5	12.2	4.74	2.52	2.78
Saturation (%)	28.2	36.6	33.7	28.2	31.9
Calcium (meq/L)	12.0	21.2	24.2	11.2	16.3
Magnesium (meq/L)	12.4	273	40.6	13.4	14.5
Sodium (meq/L)	5.26	10.8	9.43	7.43	7.83
SAR	1.5	0.59	1.65	2.11	1.99
Sand (%)	82	82	80	78	80
Silt (%)	8	6	8	12	8
Clay (%)	10	12	12	10	12
Texture Class	Loamy Sand	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam
Total Sulfur (%)	1.12	1.74	1.19	1.13	0.57
T.S. AP (t/1000t)	35.0	54.3	17.1	35.3	17.8
Neut. Pot. (t/1000t)	38.3	37.4	66.4	86.4	75.8
T.S. ABP (t/1000t)	53.30	-16.9	29.2	51.0	57.9
Nitrate- Nitrogen (ppm)	4.25	86.2	37.6	1.53	1.28
Boron (ppm)	1.66	10.2*	2.16	1.18	1.44
Selenium (ppm)	0.04	0.21	0.04	0.02	0.05
Total Organic Matter (%)					
Carbonates	8.83	3.7	6.64	8.64	7.58

Excess Spoil Area Samples

Overburden Evaluation for Vegetative Root Zone					
Parameters	**Sample Site**				
	Spoils #1 E	Spoils #1 C	Spoils #1 W	Spoils #2 C North	Spoils #2 C South
pH	Good	Good	Good	Good	Good
Ec mmhos/cm @ 25 °C	Good	Poor	Good	Fair	Fair
Saturation %	Good	Good	Good	Good	Good
Texture	Fair	Good	Good	Good	Good
SAR	Good	Good	Fair	Good	Good
Selenium	Good	Unacceptable	Good	Good	Good
Boron	Good	Unacceptable	Good	Good	Good
Acid / Base Potential	Good	Unacceptable	Good	Good	Good

Parameters	Good	Fair	Poor	Unacceptable
pH	6.1 to 8.2	5.1 to 6.1 8.2 to 8.4	4.5 to 5.0 8.5 to 9.0	< 4.5 > 9.0
Ec mmhos/cm @ 25 °C	0 to 2	2 to 8	8 to 15	> 15
Saturation %	25% to 85%		< 25% > 80%	
Texture	sl, l, sil, scl, vfsl, fsl	c, sicl, sc, ls, lfs	sic, s, sc, c, cos, fs, vfs	g, vcos
SAR	0 to 4	5 to 10	10 to 12 fine texture 10 to 15 coarse texture	12 fine texture 15 coarse texture
Selenium	< 0.1 mg/Kg			> 0.1 mg/Kg
Boron	< 5.0 mg/Kg			> 5.0 mg/Kg
Acid / Base Potential	> -5 tons $CaCO_3$ / 1,000 tons material			< -5 tons $CaCO_3$ / 1,000 tons material

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-963-9300 FAX: 630-963-9306

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ADDRESS ALL CORRESPONDENCE TO:
4665 PARIS STREET
SUITE B-200
DENVER, CO 80239
TEL: (303) 373-4772
FAX: (303) 373-4791

March 8, 2000

SUNNYSIDE OPERATIONS
P.O. BOX 159
#1 POWER PLANT ROAD
SUNNYSIDE UT 84539

Sample identification by
SUNNYSIDE COGENERATION FAC

SAMPLE ID: SPOILS #1 E

Kind of sample SOIL

Sample taken by SUNNYSIDE COGENERATION FAC

Date received December 28, 1999

Analysis report no. 72-00758-1

PARAMETER	METHOD	RESULTS	UNITS
Solids	CLPSOW390, PART-F,D-98	99.70	%
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	5.73	meq/100g
Exchangeable Sodium Percent (ESP)	USDA No. 60 (10B)(calc)	0.96	%
Nitrogen, total Kjeldahl	M3512-TKN by Block Digester	0.23	%
Total Organic Carbon	EPA 3.2.14	98.8	%

Post-it® Fax Note 7671 | Date 3-8 | # of pages 25
To Rusty Nott | From Laura
Co./Dept. | Co. CTE Denver
Phone # | Phone #
Fax # | Fax #

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Laura Jones

Denver Laboratory

MEMBER ACIL

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1819 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-8300 FAX: 708-953-8306

SINCE 1908

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PLEASE ADDRESS ALL CORRESPONDENCE TO:
4865 PARIS, B 200, DENVER, CO 80239
TEL: (303) 373-4772
FAX: (303) 373-4781

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 EASTorthing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Matter %	Carbonates	Coarse Fragments	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00758-1			8.83	98.8	0.04	0.07	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-9300 FAX: 708 953 8308

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PLEASE ADDRESS ALL CORRESPONDENCE TO:
4665 PARIS, B 200, DENVER, CO 80239
TEL: (303) 373 4772
FAX: (303) 373 4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 EASTorthing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Carbon %	Total Sulfur %	T.S. AP t/1000t	Neut. Pot. t/1000t	T.S. ABP t/1000t	Pyr+Org Sulfur %	Pyr+Org AP t/1000t	Pyr+Org ABP t/1000t	Notes
72-00758-1			1.12	35.0	88.3	53.3				

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-8300 FAX: 708-953-8306

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4665 PARIS, B 210, DENVER, CO 80239
TEL: (303) 373 4772
FAX: (303) 373 4791

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 EASTorthing :
Surface Elevation : Easting :

Lab No.	Depths	Arsenic ppm	Nitrate-Nitrogen ppm	Boron ppm	Molybdenum ppm	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00758-1			4.25	1.66		0.91	0.07	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin RP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Ezequiel Jaco

Denver Laboratory

COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-9300 FAX: 708-953-9305

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4665 PARIS, B 200, DENVER, CO 80239
TEL: (303) 373 4772
FAX: (303) 373 4791

March 8, 2000

SUNNYSIDE COGENERATION

SOIL

Location : SPOILS #1 EASTerthing :

Surface Elevation : Footing :

Lab No.	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Particle Size Sand %	Silt %	Clay %	Texture Class	Notes
72-00758-1		7.36	2.50	28.0	12.0	12.4	5.26	1.50	82	8	10	LOAMY SAND	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

COMMERCIAL TESTING & ENGINEERING CO.
GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 630-953-0300 FAX: 630-953-0306

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DENVER, CO 80239
TEL: (303) 373-4772
FAX: (303) 373-4791

March 8, 2000

SUNNYSIDE OPERATIONS
P.O. BOX 159
#1 POWER PLANT ROAD
SUNNYSIDE UT 84539

Sample identification by
SUNNYSIDE COGENERATION FAC

SAMPLE ID: SPOILS #1 C

Kind of sample SOIL

Sample taken by SUNNYSIDE COGENERATION FAC

Date received December 28, 1999

Analysis report no. 72-00759-1

PARAMETER	METHOD	RESULTS	UNITS
Solids	CLPSOW390, PART-F,D-98	97.96	%
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	8.75	meq/100g
Exchangeable Sodium Percent (ESP)	USDA No. 60 (10B)(calc)	0.07	%
Nitrogen, total Kjeldahl	M3512-TKN by Block Digester	0.18	%
Total Organic Carbon	EPA 3.2.14	93.3	%

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

MEMBER ACIL

COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-8300 FAX: 708-953-9306

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SGS Member of the SGS Group (Société Générale de Surveillance)

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4665 PARIS, B 200, DENVER, CO 80239
TEL: (303) 373 4772
FAX: (303) 373 4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 CRATER Northing :
Surface Elevation : Easting :

Lab No.	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Particle Size Sand %	Silt %	Clay %	Texture Class	Notes
72-00759-1		6.91	12.2*	36.6	21.2	273.	10.8	0.55	82	6	12	SANDY LOAM	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Esequiel Jaco

Denver Laboratory

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FAX: (303) 373-4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 CENTER Northing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Matter %	Carbonates	Coarse Fragments	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00759-1			3.7%	93.3	0.21	0.31	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

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FAX: (303) 373 4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 CENTER Northing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Carbon %	Total Sulfur %	T.S. AP t/1000t	Neut. Pot. t/1000t	T.S. ABP. t/1000t	Pyr+Org Sulfur %	Pyr+Org AP t/1000t	Pyr+Org ABP t/1000t	Notes
72-00759-1			1.74	54.3	37.4	-16.9	0.60	18.7	18.6	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

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FAX: (303) 373-4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS PT CENTER Northing :
Surface Elevation : Easting :

Lab No.	Depths	Arsenic ppm	Nitrate-Nitrogen ppm	Boron ppm	Molybdenum ppm	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00759-1			86.2*	10.2*		0.21	0.31	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guidaline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/
Spoil Material [illegible] Of Agriculture [illegible]

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March 8, 2000

SUNNYSIDE OPERATIONS
P.O. BOX 159
#1 POWER PLANT ROAD
SUNNYSIDE UT 84539

Sample identification by
SUNNYSIDE COGENERATION FAC

SAMPLE ID: SPOILS #1 W

Kind of sample SOIL

Sample taken by SUNNYSIDE COGENERATION FAC

Date received December 28, 1999

Analysis report no. 72-00760-1

PARAMETER	METHOD	RESULTS	UNITS
Solids	CLPSOW390, PART-P,D-98	99.08	%
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	8.58	meq/100g
Exchangeable Sodium Percent (ESP)	USDA No. 60 (10B)(calc)	1.17	%
Nitrogen, total Kjeldahl	M3512-TKN by Block Digester	0.22	%
Total Organic Carbon	EPA 3.2.14	96.6	%

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

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FAX: (303) 373 4791

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 WESTorthing :

Surface Elevation : Easting :

Lab No.	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Particle Size Sand %	Silt %	Clay %	Texture Class	Notes
72-00760-1		7.24	4.74	33.7	24.2	40.6	9.43	1.65	80	8	12	SANDY LOAM	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guidelins No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University of Wyoming, College of Agriculture, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

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FAX: (303) 373-4791

March 9, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 WESTorthing :
Surface Elevation : Nasting :

Lab No.	Depths	Total Organic Matter %	Carbonates	Coarse Fragments	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00760-1			6.64	95.6	0.04	0.07	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Ezequiel Jaco

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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOILS #1 NEGFortbing :

Surface Elevation : Easting :

Lab No.	Depths	Total Organic Carbon %	Total Sulfur %	T.S. AP t/1000t	Neut. Pot. t/1000t	T.S. ABP. t/1000t	Pyr+Org Sulfur %	Pyr+Org AP t/1000t	Pyr+Org ABP t/1000t	Notes
72-00760-1			1.19	37.1	66.4	29.2				

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Soil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, Haines 1994.

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FAX: (303) 37 4781

March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SOILS #1 NORTHING :
Surface Elevation : Easting :

Lab No.	Depths	Arsenic ppm	Nitrate-Nitrogen ppm	Boron ppm	Molybdenum ppm	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00760-1			37.6	2.15		0.04	0.07	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/
Spoil Material, University of Wyoming, College of [illegible]

COMMERCIAL TESTING & ENGINEERING CO.

Esequiel Jaco

Denver Laboratory

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE		Excess Spoil Pile #2	
Permit Number	ACT/007/035	**Report Date 04/13/00**	
Mine Name	SUNNYSIDE REFUSE AND SLURRY		
Company Name	SUNNYSIDE COGENERATION ASSOCIATES		
Excess Spoil Pile or Refuse Pile Identification	**Pile Name:**	Excess Spoil Disposal Area #2	
	Pile Number	N/A	
	MSHA ID Number	1211-UT-09-02093-05	
Inspection Date	03/21/00		
Inspected By	Scott Carlson		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)		First Quarter Inspection 2000	
		Attachments to Report? ☐No **X** Yes	

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

Existing disturbed site. No topsoil removal is required by approved plan. SCA is currently in the process of removing accumulated coal fines from the Slurry Pond #2 area for use as fuel.

2. Placement of underdrains and protective filter systems.

Underdrains and filters are not required by approved plan. The Slurry Ponds #1 and #2 no longer receive inflows of any storm waters. The inlet culverts have been removed and stormwater rerouted to other impoundments.

3. Installation of final surface drainage systems.

N/A

4. Placement and compaction of fill materials.

Placement and compaction of fill material continues in this disposal area. Material consists generally of coarse refuse rejects and is being placed in general conformance with the approved plan. Approximately 7,500 yards of material was placed during the Quarter.

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE	Excess Spoil Pile #2	

5. **Final grading and revegetation of fill.**

N/A

6. **Appearances of instability, structural weakness, and other hazardous conditions.**

None

7. **Other Comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatement of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period.**

Both Slurry Pond #1 and Slurry Pond #2 have been approved to be filled with coal mine waste and excess spoil in connection with construction of the Excess Spoil Disposal Area # 2.

The Clearwater Pond is also part of this disposal area but will continue to function as a sediment pond until such time as it is needed as a disposal site.

Analytical results from samples taken of the material placed in this disposal area are submitted with this quarter's report.

Certification Statement

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
STATE OF UTAH

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson - Project Manager
(Full Name and Title)

Signature: S. Scott Carlson **Date:** 04/13/00

P.E. Number & State: 187727 - UT

Excess Spoil Disposal Area # 2

Excess Spoil Disposal Area # 2

Excess Spoil Disposal Area # 2 (Slurry Pond 2 Area)

SUNNYSIDE COGENERATION ASSOCIATES - SPOILS AREA SAMPLES - DECEMBER 1999

Sample Site	Spoil #1 E	Spoile #1 C	Spoils #1 W	Spoils #2 C North	Spoils #2 C South
Lab No.	72-00758-1	72-00759-1	72-00760-1	72-00761-1	72-00762-1
Depths					
pH	7.36	6.91	7.24	6.97	7.0
EC (mmhos/cm @ 25 °C)	2.5	12.2	4.74	2.52	2.78
Saturation (%)	28.2	36.6	33.7	28.2	31.9
Calcium (meq/L)	12.0	21.2	24.2	11.2	16.3
Magnesium (meq/L)	12.4	273	40.6	13.4	14.5
Sodium (meq/L)	5.26	10.8	9.43	7.43	7.83
SAR	1.5	0.59	1.65	2.11	1.99
Sand (%)	82	82	80	78	80
Silt (%)	8	6	8	12	8
Clay (%)	10	12	12	10	12
Texture Class	Loamy Sand	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam
Total Sulfur (%)	1.12	1.74	1.19	1.13	0.57
T.S. AP (t/1000t)	35.0	54.3	17.1	35.3	17.8
Neut. Pot. (t/1000t)	38.3	37.4	66.4	86.4	75.8
T.S. ABP (t/1000t)	53.30	-16.9	29.2	51.0	57.9
Nitrate- Nitrogen (ppm)	4.25	86.2	37.6	1.53	1.28
Boron (ppm)	1.66	10.2*	2.16	1.18	1.44
Selenium (ppm)	0.04	0.21	0.04	0.02	0.05
Total Organic Matter (%)					
Carbonates	8.83	3.7	6.64	8.64	7.58

Excess Spoil Area Samples

Overburden Evaluation for Vegetative Root Zone					
Parameters	**Sample Site**				
	Spoils #1 E	Spoils #1 C	Spoils #1 W	Spoils #2 C North	Spoils #2 C South
pH	Good	Good	Good	Good	Good
Ec mmhos/cm @ 25 °C	Good	Poor	Good	Fair	Fair
Saturation %	Good	Good	Good	Good	Good
Texture	Fair	Good	Good	Good	Good
SAR	Good	Good	Fair	Good	Good
Selenium	Good	Unacceptable	Good	Good	Good
Boron	Good	Unacceptable	Good	Good	Good
Acid / Base Potential	Good	Unacceptable	Good	Good	Good

Parameters	Good	Fair	Poor	Unacceptable
pH	6.1 to 8.2	5.1 to 6.1 8.2 to 8.4	4.5 to 5.0 8.5 to 9.0	< 4.5 > 9.0
Ec mmhos/cm @ 25 °C	0 to 2	2 to 8	8 to 15	> 15
Saturation %	25% to 85%		< 25% > 80%	
Texture	sl, l, sil, scl, vfsl, fsl	c, sicl, sc, ls, lfs	sic, s, sc, c, cos, fs, vfs	g, vcos
SAR	0 to 4	5 to 10	10 to 12 fine texture 10 to 15 coarse texture	12 fine texture 15 coarse texture
Selenium	< 0.1 mg/Kg			> 0.1 mg/Kg
Boron	< 5.0 mg/Kg			> 5.0 mg/Kg
Acid / Base Potential	> -5 tons $CaCO_3$ / 1,000 tons material			< -5 tons $CaCO_3$ / 1,000 tons material

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March 8, 2000

SUNNYSIDE OPERATIONS
P.O. BOX 159
#1 POWER PLANT ROAD
SUNNYSIDE UT 84539

Sample identification by
SUNNYSIDE COGENERATION FAC

SAMPLE ID: SPOIL PILE #2 CENTER NORTH

Kind of sample SOIL

Sample taken by SUNNYSIDE COGENERATION FAC

Date received January 11, 2000

Analysis report no. 72-00761-1

PARAMETER	METHOD	RESULTS	UNITS
Solids	CLPSOW390, PART-F,D-98	99.73	%
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	11.6	meq/100g
Exchangeable Sodium Percent (ESP)	USDA No. 60 (10B)(calc)	1.82	%
Nitrogen, total Kjeldahl	M351.2-TKN by Block Digester	0.22	%
Total Organic Carbon	EPA 3.2.14	99.3	%

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL FILE #2 CR Northing :

Surface Elevation : Easting :

Lab No.	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Particle Size Sand %	Silt %	Clay %	Texture Class	Notes
72-00761-1		6.97	2.52	38.2	11.2	11.4	7.11	2.11	78	12	10	SANDY LOAM	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Ingrid Jones

Denver Laboratory

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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE #2 CR Northing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Matter %	Carbonates	Coarse Fragments	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00781-1			8.64	99.3	0.02	0.04	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

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March 8, 2000

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SOIL

Location : SPOIL PILE #2 CR Northing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Carbon %	Total Sulfur %	T.S. AP t/1000t	Neut. Pot. t/1000t	T.S. ABP. t/1000t	Pyr.Org Sulfur %	Pyr.Org AP t/1000t	Pyr.Org ABP t/1000t	Notes
72-00761-1			1.13	35.3	86.4	51.0				

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE #2 CB Northing :

Surface Elevation : Easting :

Lab No.	Depths	Arsenic ppm	Nitrate-Nitrogen ppm	Boron ppm	Molybdenum ppm	Selenium ppm	AB-DTPA Selenium ppm	Notes
72-00761-1			1.53	1.18		0.02	0.04	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin MP-82, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

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March 8, 2000

SUNNYSIDE OPERATIONS
P.O. BOX 159
#1 POWER PLANT ROAD
SUNNYSIDE UT 84539

Sample identification by
SUNNYSIDE COGENERATION FAC

SAMPLE ID: SPOIL PILE #2 CENTER SOUTH

Kind of sample SOIL

Sample taken by SUNNYSIDE COGENERATION FAC

Date received January 11, 2000

Analysis report no. 73-00762-1

PARAMETER	METHOD	RESULTS	UNITS
Solids	CLPSOW390, PART-F,D-98	99.67	%
Cation Exchange Capacity (CEC)	USDA No. 60 (19)	10.6	meq/100g
Exchangeable Sodium Percent (ESP)	USDA No. 60 (10B)(calc)	1.65	%
Nitrogen, total Kjeldahl	M3512-TKN by Block Digester	0.24	%
Total Organic Carbon	EPA 3.2.14	99.1	%

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory

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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE 82 CR Northing :

Surface Elevation : Easting :

Lab No.	Depths	pH	EC mmhos/cm @ 25°C	Saturation %	Calcium meq/l	Magnesium meq/l	Sodium meq/l	SAR	Particle Size Sand %	Silt %	Clay %	Texture Class	Notes
72-00762-1		7.00	2.78	31.9	16.3	14.5	7.93	1.99	80	8	12	SANDY LOAM	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/Spoil Material, University Of Wyoming, College of Agriculture, Laramie, WY, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Ernesto Jaco

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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE #2 CK Northing :

Surface Elevation : Easting :

Lab No.	Depths	Total Organic Matter %	Carbonates	Coarse Fragments	Selenium PPM	AB-DTPA Selenium PPM	Notes
72-00762-1			7.58	99.1	0.05	0.06	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University Of Wyoming, College Of Agriculture, Bulletin B-982, March 1994.

Respectfully submitted,
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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE #2 CR Northing :
Surface Elevation : Easting :

Lab No.	Depths	Total Organic Carbon %	Total Sulfur %	T.S. AP t/1000t	Neut. Pot. t/1000t	T.S. ABP. t/1000t	Pyr+Org Sulfur %	Pyr+Org AP t/1000t	Pyr+Org ABP t/1000t	Notes
72-00762-1			0.57	17.8	75.8	57.9				

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/Spoil Material, University Of Wyoming, College of Agriculture, Bulletin AE-81, March 1994.

Respectfully submitted,
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March 8, 2000

SUNNYSIDE COGENERATION
SOIL

Location : SPOIL PILE #1 CR Northing :
Surface Elevation : Easting :

Lab No.	Depths	Arsenic PPM	Nitrate-Nitrogen PPM	Boron PPM	Molybdenum PPM	Selenium PPM	AB DTPA Selenium PPM	Notes
72-00752-1			1.28	1.41		0.05	0.06	

Method Ref.: Wyoming D.E.Q., Land Quality Division Guideline No. 1, Topsoil And Overburden Rules Update/8-94

Standard Operating Procedures For The Sampling And Analysis Of Selenium In Soil And Overburden/ Spoil Material, University of Wyoming, College of Agriculture, Bulletin MP-91, March 1994.

Respectfully submitted,
COMMERCIAL TESTING & ENGINEERING CO.

Denver Laboratory